DOCUMENT RESUME

ED 367 998 CS 214 271

AUTHOR Patton, Jeannie
TITLE Time and Technology in Native American Indian Literature.
PUB DATE 21 Nov 93
NOTE 26p.; Paper presented at the Annual Meeting of the National Council of Teachers of English (83rd, Pittsburgh, PA, November 17-22, 1993).
PUB TYPE Speeches/Conference Papers (150) -- Viewpoints (Opinion/Position Papers, Essays, etc.) (120)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS American Indian Culture; *American Indian Literature; Characterization; *Cultural Context; Novels; Technology; *Time
IDENTIFIERS Native Americans

ABSTRACT

Understanding Native American Indian literature requires that scholars and teachers respect the cultural matrix within which the literature is written. The "ceremonial motion" of time--or "Indian time"--is a critical concept in Native American texts. When the dominant culture's time construct, linear or chronological time, superimposes on Indian characters in fiction, those characters exhibit patterns of illness and dislocation; conversely, when mythical or communal time perceptions dominate, characters regain health and harmony. Chronological marking of time leads to destruction through the development of technology that is out of synchronization with the mythological context of time. Leslie Marmon Silko's novel "Ceremony" provides an initial study in the relationship between time and technology in Native American Indian literature. Teachers of Native American Indian literature need to understand that the works unfold in several layers, and that one of the keystones to understanding the subtleties of the literature is to understand the concept of "Indian time." An appendix listing differences between technological peoples and native peoples is attached. (Author/RS)

Time and Technology

in

Native American Indian Literature

by

Jeannie Patton

NCTE Conference, November 21, 1993

Pittsburgh, Pennsylvania

Abstract

Understanding Native American Indian literature requires that scholars respect the cultural matrix within which the literature is written. The "ceremonial motion" of time -- or "Indian time" -- is a critical concept in Native American texts. When the dominant culture's time construct, linear or chronological, superimposes on Indian characters in fiction, those characters exhibit patterns of illness and dislocation; conversely, when mythical or communal time perceptions dominate, characters regain health and harmony. Chronological marking of time leads to destruction through the development of technology that is out of synchronization with the mythological context of time. Leslie Marmon Silko's novel Ceremony provides an initial study in the relationship between time and technology in Native American Indian literature.

Outline

Thesis: The linear construct of time is in opposition to a more "natural" ceremonial/mythic motion of time. Linear time and advanced technology go hand in hand; to the degree that technology removes one from ceremonial/mythic time, technology is destructive.

I. "Indian time" makes sense.
   A. Spiritual and bodily needs were not separated.
   B. "Indian time" is multidimensional and mythic.
   C. "Indian time" is based on appropriateness of action.

II. Chronological and linear notions of time contribute to dislocation and illness.
   A. Living in bondage to watches is disruptive.
   B. Understanding the "reality" of some literatures means understanding ceremonial time concepts.
   C. William Faulkner illustrates these ideas in his novels.
   D. Stress results in mythic illness.

III. Linear time concepts are linked to the destructive tendencies of modern technology.
   A. Technology depends on linear time.
   B. Technology is the chief tool of the military-industrial complex.
   C. Technology is destructive and disconnected from the natural world.
   D. Technology fills the space where "spirit" once resided.

E. Technology is not related simply to white society, but has its effects in the Indian world as well.

IV. When technology's influence is undercut, the result is good health and harmony.

A. Healing begins with re-integration into ceremonial time.

B. The marvelous and the magical are superimposed with the "real" which results in healing.

C. The story of the hero who undergoes the healing process must be integrated into the mythic history of the people for the healing to continue.

V. Disruption of Ceremonial time, or "Indian time" has direct applications in the white world.

Preface

In the pueblo cultures of the American southwest lives a deity, Grandmother Spider, or Spider Woman. In Leslie Marmon Silko's novel, Ceremony, she is named Ts'its'tsi'nako, or Thought-Woman. Grandmother Spider's special power is that she creates out of herself. The patron of weavers and storytellers, she is revered for rescuing people (especially coyote--the trickster figure of the southwest) by throwing them a lifeline when trouble threatens to bring them down. Being a storyteller of sorts, I think of her as my totem, and revere spiders for the strength and delicacy of their work.

In the plains Indians culture, particularly in the Sioux nations, the spider's name is Ik-tomi. The trickster figure himself, Ik-tomi upsets, teaches by his foolishness, and shows us the vanity of our human exploits; his cruelty is legendary.

While writing this paper, I felt Ik-tomi's nudge, because I felt caught up in webs; with each struggle to release myself from the threads of language to get to the truth of the thought, I entangled myself more deeply. Surely the trickster wishes to remind me of the limitations of my knowledge, and the vanity required to attempt to teach others that which one only knows hazily oneself.

Pielo mayan, Ik-tomi. Waste.

Time and Technology in Native American Indian Literature

Once upon a time, in the land beneath our feet, sophisticated human beings passed through the events of their lives without time-pieces strapped across the pulses of their wrists. Time was marked by the progress of the sun and moon across the sky; events were remembered and planned by season, by weather, by circumstance. In this paradigm, people arose at the right "time"--usually with a welcoming song to the sun to celebrate the gift of a new day; slept at the right "time"--generally when tired and when free circumstances allowed the rest period.

Once upon a time, human beings ate when hungry, after having hunted, gathered, or grown food; they drank when thirsty and water was available; and they made love when lusty, hopefully with an available and willing partner.

Surely this concept of time is the absolute definition of what constitutes happiness.

When "time to call a meeting" arrived, individuals who arrived within sunrises and sunsets of each other were most certainly "on time" for the conference. Matters of importance came up for discussion as many times and for as long as was necessary--meetings convened at the "starting time," and broke up when participants agreed that the discussion was over. Sufficient and appropriate time was "allocated" for thinking over important matters and agreements were formed at the appropriate juncture of wisdom and opportunity.

The inhabitants of "once upon a time" are not fairy tale characters, but fully developed cultures--Native American Indian Nations--who responded to spiritual, biological, geographical and ceremonial rhythms of time that modern, technological societies lack. Prior to technological intervention, they didn't check watches to verify meal times, play times, or love-making times.

Therefore, in order to understand a basic premise that orders much of Native American Indian literature, and because the dominant white culture is so deeply immersed in the matrix of chronological time (so much so that one checks clocks to confirm that not enough "time" exists for allocated tasks), a definition of "Indian time" is required. Dr. Paula Gunn Allen, a celebrated Laguna Indian scholar who earned her Ph.D. in American Indian Studies, vehemently opposes "outsiders"--that's white, non-tribal folks--interpreting that which she feels non-natives cannot understand. Her definition of time, therefore, provides the insider's knowledgeable point of view.

Because "the purpose of literature is clear only when the reader understands and accepts the assumptions on which the literature is based" (Allen "Ceremonial" 54), readers must understand that the "traditional tribal concept of time is of timelessness, as the concept of space is of multidimensionality. In the ceremonial world the tribes inhabit, time and space are mythic" (147).

Allen credits Fred Young, a Navajo mathematician and physicist, with explaining the essential movement of time and

space; she learned that the tribal sense of "self" as a "moving event within a moving universe" reminds one of the physicists' interpretation of a particle within time and space (147). Physicist Stephen W. Hawking agrees when he writes in his book, A Brief History of Time: "In the theory of relativity there is no unique absolute time, but instead each individual has his own personal measure of time that depends on where he is and how he is moving" (33). That is, ceremonial and achronological time emphasize the interplay of person and event and have nothing to do with linear ordering.

In her study, "The Ceremonial Motion of Indian Time," Allen writes that Indians base time on appropriateness of action. Indian people have a "ritual understanding of order and harmony. For an Indian, if being on time means being out of harmony with self and ritual, the Indian will be 'late'" (154). The ritual understanding of order and harmony that also includes the active influence of all the actors and elements of a culture's mythic history comprises my definition of "ceremonial time."

If chronological time means arranging and understanding events in the order of their happening, Native American Indians certainly use chronological time as one standard for marking their histories. However, the traditional behavior of native peoples is not restricted to clocks; rather, it encompasses both achronological and ceremonial time referents that respond to the deeper rhythms of human "being."

Try this experiment: remove your watches and any other

time pieces to a place where you cannot see them. I predict that you'll feel one of two responses: either you'll grow more anxious as this session proceeds because you won't know the time, or you'll enjoy the liberation from a timepiece that has been strangling you today. You might fear that I will keep you too long, making you late for your next appointment. If your stomach growls, you can't check to see if meal time has arrived. Because we sit beneath artificial lighting in an artificially air-conditioned room, you won't know the time of day or night, or the temperature of the real world. Clocks begin to feel highly artificial when put into this context.

Perhaps this temporary loss of your time-piece provides a glimpse into the devastating dislocation suffered by those who, paradoxically, do NOT subscribe primarily to chronological modes of organization. Your discomfort is temporary; those who live within "ceremonial time" suffer anxiety, dislocation, alienation and mental and physical illness of mythic proportions when trapped in a chronological paradigm that directs every action of the day.

The idea that one can move into and out of ceremonial time is important in understanding the primary dislocation and alienation of the protagonists in much of Native American Indian literature. By looking at Tayo, the protagonist of Leslie Marmon Silko's brilliant novel Ceremony, students of "Indian time" will better understand ceremonial time in its context of healing.

Modern Americans live in bondage to their watches--symbols

of high regard for time: wasted, lost, spent, passed, marked, used well, bought, whatever. According to themes that reappear in Native American Indian literature--not just Silko's, but of a variety of authors--when one forsakes linear time in order to enter mythological, ceremonial time, renewed spirituality and improved physical health result. Those characters who remain victims of the time machine inevitably suffer; their suffering is manifested in alcoholism, homelessness, lack of community support, emptiness and self-destructive tendencies.

In Silko's Ceremony, the moments of ceremonial time occur both before and after Tayo's session with Old Betonie, when he joins in intercourse with Night Swan (Josiah's lover who has generative power) and Ts'eh, the female spirit guide who lives on Mt. Taylor and as Tayo steps deeper and deeper on his physical wanderings to the uranium site to confront the "destroyers." His moments in the snowstorm, by the sandrock pools of rainwater, working with Robert and the spotted cattle, all set in motion by Old Betonie's ceremony to counteract the modern witchery, are moments of ceremonial, mythic time and space which allow Tayo to move in ways that are blissful in their grace.

Regarding characters and ceremonial time in Native American literature, Allen says:

> The protagonist wanders through a series of events that might have happened years before or that might not have happened to him or her personally, but that nevertheless have immediate bearing on the situation and the

protagonist's understanding of it. ("Ceremonial" 148)

Tribal understanding of reality directly relates to ceremonial time, rather than industrial, pastoral, institutional, theological or agricultural structuring of time (149). Humans move through past and present, through events others have experienced, but which an individual may have not experienced himself, and participate in mythological events. The past is superimposed on the present, effectively eliminating the concept that the past is past.

In canonical American literature, William Faulkner is the greatest practitioner of non-linear time that borders on ceremonial implications. (Silko herself says she was influenced by Faulkner's writing--Coltelli 145). Faulkner insists that the past continues in the present, that life's wheel rolls on dusty roads of memory and experience, repeating the circle with each round of the hoop.

When characters are out of harmony--usually victims of a structured world view that allows no quarter for daydreams, night chants, songlines, or other mythical movements on the grid--stress builds. Tayo stands powerless in the memory of Japanese faces who look like his Uncle Josiah. His friends and family enjoy few moments of true cheer--they drink, argue, enrage each other. All the characters drive up and down the line, wandering, unable to name, much less bridge, the gap that separates the pueblo Indians from the cultures that would destroy all living beings. Human beings suffer serious illness when they operate

within structures that remove them from ceremonial rhythms and spirit guides who normally participate in daily life.

Once readers understand the relationship of non-linear time with deeper patterns of human behavior, the next step is to connect the relationship of linear time with the destructive outcomes of technology.

Technology depends absolutely on linear time. Allen affirms that the belief that time operates external to the internal workings of human and other beings, "contrasts sharply with ceremonial time, [which] assumes the individual as a moving event shaped by and shaping human and nonhuman surroundings" ("Ceremonial" 149).

In his book In the Absence of the Sacred, sub-titled The Failure of Technology and the Survival of the Indian Nations, author Jerry Mander offers harsh criticism of the technological age, which he defines as "the information society" of "computerization, robotization, space travel, artificial intelligence, genetics, and satellite communications" (2).

On the one hand, Mander notes, society views most technology with favor, thanks to expert public relations campaigns on the part of the technology's inventors and the illusion that technology makes lives easier and work more efficient. He suggests that our homilies "Progress is good," "There's no turning back" and "Technology will free humans from disease, strife, and unremitting toil" are misplaced, and that the idea of technology as a neutral tool is dangerously naive (2-3), and

that technology actually contributes to disease, strife and toil. Technology creates stress. Among his primary concerns are that technological developments are, if not the direct brain-children of the military-industrial complex, the bastards thereof:

> Computers, like television, are far more valuable and helpful to the military, to multinational corporations, international banking, to governments, and to institutions of surveillance and control--all of whom use this technology on a scale and with a speed that are beyond our imaginings--than they ever will be to you and me. (3)

He adds that in times of national crisis, the military and government use technologies to promote the propaganda of the moment, and that, for example, television is "a perfect instrument for the centralized control of information and consciousness" (3).

Mander's most damning words lie in his accusation that in the "postbiological age" of nanotechnology and robotics, technology's "advocates don't even pretend to care about the natural world. They think it's silly and out of date" (4).

In Ceremony, Betonie fights a new kind of witchery, "the cities, the tall buildings, the noise and the lights, the power of their weapons and machines" (169)--technology the likes of which the pueblo Indians had not seen before. "They had seen what the white people had made from the stolen land [and] tried to sink the loss in booze, and silence their grief with war

stories about their courage, defending the land they had already lost" (169).

While many may disagree with Mander's premise that technology per se is flawed at best and evil at worst with regard to sensing mythic rhythms, his point is well-taken that technology has certainly removed human beings from original experience with the natural world (see Appendix for detailed comparisons). Few moments in anyone's daily life remain unmediated in some way by technology: consider that people enclose themselves in boxlike rooms, surrounded by "pavement, machinery, gigantic concrete structures. Automobiles, airplanes, computers, appliances, television, electric lights, and artificial air" (Mander 31), and people accept these technological advances to be the essence of the good life. Rather that offering Tayo comfort, technological overload within the chronological time scheme contribute to his schizophrenia. His life is devoid of spirit--indeed, at one point in the novel, he tells his doctor that everything is either dead or dying.

Both Mander and Silko agree on this point: that the emptiness that results from technology filling the space where spirit once resided leads to chaos:

> For more than two hundred years white people had worked to fill their emptiness; they tried to glut the hollowness with patriotic wars and with great technology and the wealth it brought. And always they

had been fooling themselves, and they knew it. (Silko 191)

Canonical literature devotes considerable attention to the negative results of technological age: pick up Melville's "Bartleby, the Scrivener" or Rebecca Harding Davis' "Life in the Iron-Mills" for primers. In "Bartleby," the scrivener dies closed in a fetal position at the foot of a dark wall because he "preferred not to" be treated as a human xerox machine. In Davis' work, the back-breaking labor and emotional and spiritual starvation of the protagonist extends beyond Melville's thesis in "The Paradise of Bachelors, The Tartarus of Maids," and points to psychic and physical sickness that destroy body and soul. In England, people despised industrial revolution in technology so much that huge numbers of workers in cottage industries revolted, invaded factories and destroyed machines. They opposed what Langdon Winner calls "a new economic order, which they predicted would destroy their livelihood and traditions, and lead the world in a destructive direction" (qtd in Mander 37).

Chronological time is to technology as the second hand sweep is to the circle of the watch. Lock-step adherence to schedules and machines produces goods for the many and wealth for a significant few. The single individual struggles amid the meshing gears, and becomes defined by the totally manufactured world. As noted in Ceremony, Tayo hates whites for "what they did to the earth with their machines" (Silko 203) and for "destroy[ing] the feeling people have for each other" (229).

According to Silko, technology's capability for destruction has no peer in mankind's history. She considers her novels statements of "subversion" and notes that "when you confront the so-called mainstream, it's very inefficient, and in every way possible destroys you and disarms you" (Coltelli 148). However, in Ceremony she warns the people not to identify technology's evil completely with white society. Old Betonie includes Indian people when he talks about the destroyers:

> The trickery of the witchcraft [is that] they want us to believe all evil resides with white people. Then we will look no further to see what is really happening. They want us to separate ourselves from white people, to be ignorant and helpless as we watch our own destruction. (Silko 132).

Elizabeth Evasdaughter points out that Betonie would "rather see a separation between good and evil, starlight and blackness, than between Indian and white" (91).

Putting a particle back in motion in the moving universe undercuts technology's negative influence. Allen explains:

> Dancing in the midst of turning, whirling hoops is a means of transcending the limits of chronological time and its traumatizing, disease-causing effects. Chronological time denies that an individual is one with the surroundings. The hoop dancer dances within what encircles him, demonstrating how the people live

> in motion within the circling spirals of time and space. ("Ceremonial" 150)

In Ceremony, Tayo is the moving particle (protagonist) on the background grid (setting). Quite literally, Tayo meanders from event to event. On the one hand, some members of his community want to lock him in the mental ward because of his less-than-efficient (e.g. too slow) recovery from battle fatigue; however, Tayo's relationship to the deeper ritual life of the tribe is more critical than an immediate, efficient "cure." His inability to recover, to perform in the rhythmless world of the whites, results from of his inability to participate in healing ceremonial time.

When Betonie literally sets Tayo within circles of time and events that preceded him, Tayo's healing process begins. His wanderings put him in full participation with events that happened before him, with the spiritual soul of his people, with the rhythm of the earth itself. He travels in the four sacred directions (though he appears not to be conscious of that), which brings him to the locus of the native people's deepest disruption. Trinity site, the place of the first atomic bomb explosion, lies only 300 miles from him, and "the top-secret labs where the bomb had been created sat deep in the Jemez Mountains, on land the Government took from Cochiti Pueblo" (Silko 246). He participates in the convergence of cultures and worlds, and sees all humans "united by a circle of death that devoured people in cities 12,000 miles away" (246).

The understanding of the horrific results of technology's power--the ability to eliminate all living beings with computerized efficiency--merges with Tayo's renewed sense of ceremonial time. He sees how all the stories fit together, and understands that he participates in the ever-spinning present: a place where the "world has no boundaries, only transitions through all distances and time" (246). The "witchery" he confronts is the violence and dislocation of the "destroyers," achieved by their distancing from ceremonial motions of time for the technological benefits of chronological time. The people have experienced Tayo's kind of enlightenment before. Tayo's grandmother recognizes an old tale when she hears his story:

> Old Grandma shook her head slowly, and closed her cloudy eyes again. "I guess I must be getting old," she said, "because these goings-on-around Laguna don't get me excited any more." She sighed, and laid her head back on the chair. "It seems like I already heard these stories before . . . only thing is, the names sound different. (260)

In her article "Henry James, Meet Spider Woman," Mary Slowik studies the narrative form in Ceremony, noting that two modes exist: the magical and real, as evidenced by Silko's positioning Indian tales, specifically the Reed Woman/Corn Woman contention over water, as independent chapters with the realist text. In the first half of Ceremony, the tales interrupt the narrative line, while in the later half--during the Fly and Hummingbird

stories--they become superimposed on the main narrative, playing off and shaping each other (106). This is exactly the performance of ceremonial time in the text: the marvelous and the real become one with each other, resulting in harmony and healing. This superimposition takes "time" and cosmic understanding that transcends daily reality.

With Tayo's healing accomplished, he sits among the tribal elders to tell his story, thus joining his personal epic to the tribal's mythic and communal history. His journey results in healing lessons for his people, and his experience provides medicine for those who can understand and live its message. His tale becomes a manual for physical survival, and "puts him at the center of a web of communal storytelling" (Slowik 112). His actions enter ceremonial time where "space and time are not abstract categories of mind but physical realities known through practical knowledge passed on by many speakers to many listeners" (112).

Remember Paula Gunn Allen's observation that humans move through past and present, through events others have experienced, but which an individual may have not experienced himself, and participate in mythological events. The past is superimposed on the present, effectively eliminating the concept that the past is a historical referent only. At the end of Ceremony Tayo's story merges with all the others of his people, becoming part of the eternal present.

According to A. LaVonne Brown Ruoff, general editor of the

American Indian Lives series, and specialist on literature written in English by American Indians:

> Scholars and teachers cannot approach Indian literatures from the western European critical traditions in which they have been trained. Instead they must approach them from the religious, social, and literary traditions of American Indian cultures that influence these literatures. (3)

In her work, "Special Problems in Teaching Leslie Marmon Silko's Ceremony," Allen argues that "teaching a native text without recourse to ethnographic as well as historical glossing is an exercise in obscurity, because texts . . . are firmly embedded within the matrix of their cultural base" (379).

Therefore, it is essential that teachers of Native American Indian literature understand that the works unfold on several layers, and that one of the keystones to understanding the subtleties of the literature is to understand the concept of "Indian time" as ceremonial time; and, finally to know that the concept of white linear, chronological time is anathema to mythic participation in life and the communal history of the people.

Further, educators must link the concept of time awareness to contemporary readers by pointing out that all people suffer this dislocation--not only Native American Indians. We do native literatures a disservice if we relegate their themes to a specific cultural world view, rather than assimilate their truths within our systems. As I mentioned previously, anglo-American

writers also consider these themes regarding the inherent destructiveness of modern technology--and literature is nothing if not a commentary on and a redefinition of "truth."

Should you care to, please strap your watches back onto the pulse points of your wrists. Our time together is finished. Wopila. Hetchetu welo.

APPENDIX

According to Jerry Mander, native societies and technologized societies demonstrate a variety of differences in how they view the world. Following is Mander's Table of Inherent Differences, covering pages 215 through 219 of In the Absence of the Sacred.

Technological Peoples	Native Peoples
ECONOMICS	
Concept of private property a basic value: includes resources, land, ability to buy and sell, and inheritance. Some state ownership. Corporate ownership predominates.	No private ownership of resources such as land, water, minerals, or plant life. No concept of selling land. No inheritance.
Goods produced mostly for sale, not for personal use.	Goods produced for use value.
Surplus production, profit motive essential. Sales techniques must create "need," hence advertising.	Subsistence goals: no profit motive, little surplus production.
Economic growth required, especially in capitalist societies, hence need for increased production, increased use of resources, expansion of production and market territories.	Steady-state economics: no concept of economic growth.
Currency system—abstract value.	Barter system—concrete value.
Competition (in capitalist countries), production for private gain. Reward according to task/wages.	Cooperative, collective production.
Average workday, 8–12 hours.	Average workday 3–5 hours.
Nature viewed as "resource."	Nature viewed as "being"; humans seen as part of nature.

Technological Peoples	Native Peoples
POLITICS AND POWER	
Hierarchical political forms.	Mostly non-hierarchical: "chiefs" have no coercive power.
Decisions generally made by executive power, majority rule, or dictatorship.	Decisions usually based on consensual process involving whole tribe.
Spectrum from representative democracy to autocratic rule.	Direct participatory democracy; rare examples of autocracy.
Operative political modes are communist, socialist, monarchist, capitalist, or fascist.	Recognizable operative political modes are anarchist, communist, or theocratic.
Centralization: most power concentrated in central authorities.	Decentralization: power resides mainly in community, among people. (Some exceptions include Incas, Aztec, et al.)
Laws are codified, written. Adversarial process. Anthropocentrism forms basis of law. Criminal cases judged by strangers (in U.S., western Europe, Soviet Union). No taboo.	Laws transmitted orally. No adversarial process. Laws interpreted for individual cases. "Natural law" used as basis. Criminal cases settled by groups of peers known to "criminal." Taboo.
Concept of "state."	Identity as "nation."
SOCIOCULTURAL ARRANGEMENTS AND DEMOGRAPHICS	
Large-scale societies; most societies have high population density.	Small-scale societies, all people acquainted; low population density.
Lineage mostly patrilineal.	Lineage mostly matrilineal, with some variation; family property rights run through female.
Nuclear two- or one-parent families; also "singles."	Extended families: generations, sometimes many families, live together.

Technological Peoples	Native Peoples
Revere the young.	Revere the old.
History written in books, portrayed in television docudramas.	History transmitted in oral tradition, carried through memory.

RELIGION AND PHILOSOPHY

Separation of spirituality from rest of life in most Western cultures (though not in some Muslim, Hindu, or Buddhist states); church and state separated; materialism is dominant philosophy in Western countries.	Spirituality integrated with all aspects of daily life.
Either monotheistic concept of single, male god, or atheistic.	Polytheistic concepts based on nature, male and female forces, animism.
Futuristic/linear concept of time; de-emphasis of past.	Integration of past and present.
The dead are regarded as gone.	The dead are regarded as present.
Individuals gain most information from media, schools, authority figures outside their immediate community or experience.	Individuals gain information from personal experiences.
Time measured by machines; schedules dictate when to do things.	Time measured by awareness according to observance of nature; time to do something is when time is right.
Saving and acquiring.	Sharing and giving.

It is important to note that the characteristics on each side of this chart form an internally consistent logic. In politics, for example, hierarchical power makes a great deal more sense for operating a large-scale technological society in widely separated parts of the world than does a consensual decision-making process, which is much too slow to keep pace with machinery, electronics, and the need to grow and expand. In relation to the environment, the notion of "humans above nature" is more fitting for technological cultures, and for capitalism in particular, than "humans within nature," which throws wrenches in the wheels of progress.

Works Cited

Allen, Paula Gunn. "The Ceremonial Motion of Indian Time: Long Ago, So Far." The Sacred Hoop: Recovering the Feminine in American Indian Traditions. Boston: Beacon Press, 1986. 147-154.

-----. "Special Problems in Teaching Leslie Marmon Silko's Ceremony." The American Indian Quarterly 14 (Fall, 1990): 379-386.

Coltelli, Laura. Winged Words: American Indian Writers Speak. Lincoln: U of NB P, 1990.

Evasdaugher, Elizabeth N. "Leslie Marmon Silko's Ceremony: Healing Ethnic Hatred by Mixed-Breed Laughter." MELUS 15 (1988): 83-95.

Hawking, Stephen W. A Brief History of Time: From the Big Bang to Black Holes. NY: Bantam, 1988.

Mander, Jerry. In The Absence of The Sacred: The Failure of Technology & the Survival of the Indian Nations. San Francisco: Sierra Club Books, 1992.

Ruoff, A. LaVonne Brown. "American Indian Literatures: Introduction and Bibliography." American Studies International 24 (Oct. 1986): 2-52.

Silko, Leslie Marmon. Ceremony. NY: Penguin, 1977.

Slowik, Mary. "Henry James, Meet Spider Woman: A Study of Narrative Form in Leslie Silko's Ceremony." North Dakota Quarterly Spring (1988): 104-120.